

AERONAUTICAL CHARTING FORUM
Instrument Procedures Group
Meeting 04-01 – April 28-29, 2004
History Record

FAA Control # 04-01-251

Subject: Cold Temperature Correction Procedural Notes

Background/Discussion: Currently, cold temperature correction procedural notes on applicable U.S. FAA SIAPs state “Baro /VNAV not authorized below -XX°C.” As currently worded the notes are often misinterpreted by pilots. The wording unduly singles out and penalizes newer navigation systems that provide the means to perform constant angle descents using VNAV. Pilots who encounter these notes/conditions may be inclined to divert to an alternate location entirely, or continue to the original destination but revert to a ‘dive & drive’ descent instead of using VNAV. Neither option is appropriate, as cold temperature conditions have an affect on all types of operations, including conventional ‘dive & drive’ procedures.

Also, in some situations, the procedural notes may be included on approach procedures where extreme cold temperature conditions are highly unlikely to occur, such as airports in southern Florida. In these examples, credibility and effectiveness of the note comes into question.

Recommendations: The ATA FMS/RNAV Task Force and the ATA Chart & Data Display Committee both recommend the FAA continue to actively address cold temperature correction procedures and coordinate an appropriate solution on an industry-wide basis, as well as on an international level. It is understood the subject is quite complex and solutions may be difficult to achieve.

For example: The FAA should uniformly assess a baseline cold temperature. The condition does not relate exclusively to VNAV operations. Cold temperature procedural notes should be modified to address the need to use “appropriate cold temperature correction procedures” – in general – not just for VNAV operations. The same compensations should apply to conventional procedures.

Comments: The subject was originally presented to the ATA FMS/RNAV Task Force by the Boeing Company. The Task Force’s Chart & Database Compatibility Subcommittee reviewed the proposal, and coordinated with the ATA’s Chart & Data Display Committee. The recommendation was endorsed by both the FMS/RNAV TF and the CDDC, to be carried forward for presentation to the FAA for consideration.

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FMS/RNAV Task Force and Chart & Data Display Committee

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Date: April 7, 2004

Initial Discussion – Meeting 04-01: Ted Thompson, Jeppesen, presented this issue on behalf of the Air Transport Association (ATA) FMS/RNAV Task Force and Chart & Data Display Committee (CDDC). ATA is concerned that the wording of the note (“Baro /VNAV not authorized below -XX°C”) is often misinterpreted by pilots. Pilots are interpreting the note to mean that constant angle descent operations are not applicable and “dive and drive” applies. In fact baro- VNAV is usable with cold temperature correction. Additionally, since the note only applies to RNAV approaches, pilots falsely assume that conventional navigation procedures are satisfactory. Bill Hammett, AFS-420 (ISI) suggested that this issue be accepted and combined with Issue 92-01-110, which is currently being staffed by AFS-410. The group concurred. **Issue Closed – See 92-01-110.**